

NOTE ON THE GENERA OF SYNANCEINE AND PELORINE
FISHES.

By THEODORE GILL,
Honorary Associate in Zoology.

For a long time I have been in doubt respecting the application of the name *Synanceia* and the consequent nomenclature of some other genera of the same group. Complication has resulted by reason of the intrusion of the incompetent Swainson into the field.

In 1801 Bloch and Schneider's name *Synanceja* was published (p. 194) with a definition, and the only species mentioned were named as follows:

1. HORRIDA	<i>Synanceia horrida.</i>
2. URANOSCOPA	<i>Trachicephalus uranoscopus.</i>
3. VERRUCOSA	<i>Synanceia verrucosa.</i>
4. DIDACTYLA	<i>Simopias didactylus.</i>
5. RUBICUNDA	<i>Simopias didactylus.</i>
6. PAPILLOSUS	<i>Scorpana cottoides.</i>

Two of the species having been withdrawn from the genus by Cuvier to form the genus *Pelor* (1817), and one to serve for the genus *Trachicephalus* (1839), the name *Synanceja* was thus restricted to the *horrida* and *verrucosa*.

In 1839 Swainson attempted to reclassify the Synanceines and named three genera, but on each of the three pages of his work (II, pp. 61, 180, 268) in which he treats of those fishes he has expressed different views.

On page 61 the names of Synanchia, Pelor, Erosa, Trichophasia, and Hemitripterus appear as "genera of the Synanchinæ" and analogues of five genera of "Scorpeninæ."

On page 180 the following names are given under the head of Synanchinæ:

- Agriopus.
- Synanchia, with three subgenera, viz:
 - Synanchia.
 - Bufichthys.
 - Trachicephalus.
- Trichodon.

On pages 267 and 268 another arrangement of the Synanchinae or "Hogfish" is given with quasi-definitions and designation of types, viz:

Agriopns.

Pelor.

Synanchia, with three subgenera, viz:

Synanchia (*erosa*)

Bufichthys (*horrida*).

Trachicephalus (*elongatus*).

Trichodon.

The definitions are, in a couple of cases, practically exchanged with those on former pages, so that the equivalents are as follows:

P. 268.	P. 61.	Pp. 180, 181.
Synanchia.	Erosa	Bufichthys.
Bufichthys.	Synanchia.	Synanchia.
Trachicephalus.	Trichophasia.	Trachicephalus.

Which has priority?

The mutations being published at the same time, it may justly be considered that we may have the right to accept the fullest expression of opinion as the determining one. Still more, the data on the previous pages are too meager and defective otherwise to determine what Swainson meant. It is only by comparison with the last exposition that we are able to ascertain what was intended by his former schemes. The preceding ones may be thus canceled, and the last is left to adopt or otherwise, as the history of the nomenclature may indicate.

In 1874 P. Bleeker published a "Révision des espèces insulindiennes de la famille des Synancéoides," in which he recognized four genera, exclusive of one not occurring in the region under consideration. The four corresponded essentially to the Swainsonian (pp. 267, 268), as follows:

Bleeker.	Swainson.
Pelor.	Pelor.
Synanceia.	Bufichthys.
Leptosynanceia.	
Polycaulus.	Trachicephalus.

The remaining genus was named *Synanchia* after Swainson, and its type was *S. erosa*.

In 1904 Jordan and Starks admitted four genera, having had no occasion to mention the others. The four may be thus correlated with genera admitted by Bleeker.

Jordan and Starks.	Bleeker.
Synanceia.	Synanceia.
Erosa.	Synanchia.
Pelor. } Inimicus. }	Pelor.

The conclusions forced on the present writer agree essentially with those reached by Jordan and Starks. As indicated by them, "*Syn-*

anchia Swainson" was little more than "a mere misprint or vagary of spelling for *Synanceia*." It was, however, something more, for it was the form which the old Romans would have adopted if they had been called to latinize such a derivative from the Greek word *συνάγχη*. In fact, they did so in the form *synanche* or *cyananche*, the source of the English word quinsy. Therefore *Synanchia* was rather a proper correction of *Synanceia* than "a vagary of spelling." Nevertheless, as the original form *Synanceia* may be retained, and inasmuch as Swainson merely used *Synanchia* in place of *Synanceia*, Bleeker's usage was quite illegitimate. Such being the facts, the synonyms of the several genera apparently should be apportioned in the following manner:

SUBFAMILY SYNANCEINÆ.

Synanceinae KAUP, Archiv f. Naturg., 1873, I, p. 79.

Synanceinae GILL, Mem. Nat. Acad. Sci., VI, 1896, p. 135.

Synanceinae JORDAN AND STARKS, Proc. U. S. Nat. Mus., XXVII, 1904, p. 93.

SYNANCEIA.

Synanceia BLOCHII Syst. Ich., Schneider ed., p. 194.

Synanceia CUVIER AND VALENCIENNES, Hist. Nat. Poiss., IV, 1829, p. 440.

Synanchia SWAINSON, Nat. Hist. Fish, etc., II, 1839, p. 180.

Bujichthys SWAINSON, Nat. Hist. Fish, etc., II, 1839, p. 268.

Synanceidium MÜLLER, Abhandl. k. Akad. Berlin, 1844, p. 163.

Synanceichthys BLEEKER, Onz. Not. Ich. Ternate in Ned. T. Dierk, I, p. 234.

Synanceia BLEEKER, Rev. Synanceoides, 1874, p. 10.

The genera *Synanceia* and *Synanceidium* have been separated solely on the ground that the former was supposed to have no vomerine teeth while the latter had some. Bleeker has expressly declared that the *S. horrida* sometimes has and sometimes has not vomerine teeth, and that such variation may occur in old as well as young; consequently the character has not even specific value and therefore the genera based on such a character are worthless. There are differences in the structure of the head which might justify generic separation but, according to Bleeker, the *S. platyrhynchus* is intermediate and nullifies the significance of such characters.

EROSA.

Erosa SWAINSON, Nat. Hist. Classif. Fishes, etc., II, 1839, p. 61.

Bujichthys SWAINSON, Nat. Hist. Classif. Fishes, etc., II, 1839, p. 180.

Synanchia SWAINSON, Nat. Hist. Classif. Fishes, etc., II, 1839, p. 268.

Synanchia BLEEKER, Rev. Synanceoides, p. 4, in Nat. Verh. Holl. Maatsch Wetensch., (3) II, No. 3, 1874.

Erosa JORDAN AND STARKS, Proc. U. S. Nat. Mus., XXVII, 1904, p. 156.

LEPTOSYNANCEIA.

Leptosynanceia BLEEKER, Rev. Synanceoïdes, 1874, p. 17.

A very distinct genus based on the *Synanceia astroblepa* of Richardson.^a

TRACHICEPHALUS.

Trachicephalus SWAINSON, Nat. Hist. Class. Fishes, etc., II, 1839, pp. 181, 268.

Trichophasia SWAINSON, Nat. Hist. Class. Fishes, etc., II, 1839, p. 61.

Polycaulus GÜNTHER, Cat. Fishes Brit. Mus., II, 1860.

Cranoblepus GILL, Cat. Fishes E. C. N. Am., 1861.

The name *Trachicephalus* was rejected and substitutes proposed at nearly the same time by Günther (late in 1860) and Gill (early in 1861) because of the similarity of *Trachicephalus* and *Trachycephalus*. The two, however, are etymologically distinct, the one referring to the rough head (*τραχύς*, rough) and the other to the similarity of the head to that of a *Trachinus*, Swainson expressly declaring that "*Trachicephalus*" has the "shape and general aspect of *Trachinus*." In other terms, the two names are as distinct as *Macrocephalus* and *Microcephalus*, which have opposite meanings. *Trachicephalus* is therefore retained.

SUBFAMILY INIMICINÆ.

Pelorina GILL, Mem. Nat. Acad. Sci., VI, 1896, p. 135.

Pelorina JORDAN AND STARKS, Proc. U. S. Nat. Mus., XXVII, 1904, p. 93.

SIMOPIAS.

Les Synanceïes (*Synanceia*) §, CUVIER, Règne Animal, II, 1817, p. 286.

Les Pelors, CUVIER, Règne Animal, II, 1829, p. 168 (not "*Pelor*, Bonelli Mem. Acad. Tur., 1813").

The name *Pelor* can not be retained for this genus inasmuch as it had been appropriated, in 1813 by Bonelli, for a genus of caraboid beetles; this genus, though long regarded as a synonym of *Zabrus*, has been revived by Ganglbaur as a subgenus under *Zabrus*.

The name here proposed as a substitute is a compound of the Greek *σιμπος*, snub-nose, *οφ*, eye, with the suffix—*ιας*; allusion is made to the elevated supraorbital ridge and snout—the snubnosed high-orbited fish.

INIMICUS.

Inimicus JORDAN AND STARKS, Proc. U. S. Nat. Mus., XXVII, 1904, pp. 93, 158.

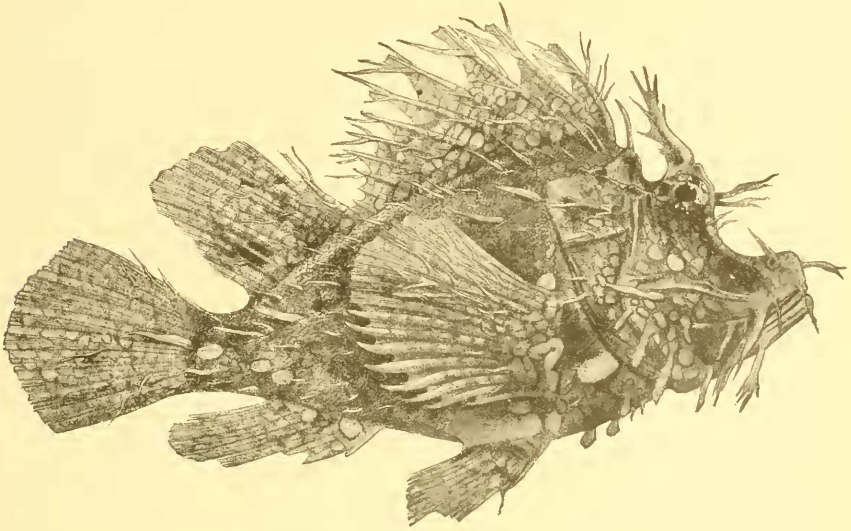
Pelor sp. AUCT.

This group, established at the expense of *Pelor* for those species with the upper pectoral rays not prolonged, as in the typical species, may be regarded as a mere subgenus of the old *Pelor*, and in that case should be considered as the generic name, while *Simopias* would follow as a subgeneric designation for *Pelor filamentosus*.

^aZoology of the Voyage of the Sulphur, p. 69, pl. xxxix.

NOTE ON SCORPÆNA FRONDOSA.

Inasmuch as much emphasis has been laid on the peculiar elevation of the snout and orbits of the Pelors, it is in place to refer to a form originally described as *Scorpæna frondosa*,^a which has analogous characters. That species evidently does not belong to the genus *Scorpæna*, and may be isolated as the type of a new one to be named *Rhinopias*. It is well distinguished by the excavated crown and ele-



RHINOPIAS FRONDOSA. (AFTER GÜNTHER.)

vated nape and orbits, as well as by the elongated profile and upturned snout; the pectorals have narrower bases, the ventrals more advanced, and the vertical fins more elevated than in the typical *Scorpæna*. The *Rhinopias frondosa* of Mauritius is the only known species.

The figure accompanying the original description is here reproduced.

^a Günther, Proc. Zool. Soc., 1891, p. 483, pl. XXXIX.